### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021621 Address: 333 Burma Road **Date Inspected:** 16-Feb-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

#### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

#### MAGNETIC PARTICLE TESTING

ZPMC NWIT No: 08336

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (MT) report on this date. The members are identified as OBG 13CE. The weld designations are as follows:

SEG3011G-093, 095, 097, 099, 101, 103, 105, 107, 109, 111, 135, 136, 139, 141, 143, 145, 147, 149, 153

This QA Inspector randomly observed the following work in progress.

**OBG 14EAST** 

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037932 performing the Shielded Metal

# WELDING INSPECTION REPORT

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Arc Welding process on weld 007 located at PCMK SEG3019Z. ZPMC QC Mr. Guo Xing Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2114-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068097 performing the Shielded Metal Arc Welding process on weld 008 located at PCMK SEG3019Z. ZPMC QC Mr. Guo Xing Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2114-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066763 performing the Flux Cored Arc Welding process on weld 067 located at PCMK SEG3019S. ZPMC QC Mr. Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 058087 performing the Shielded Metal Arc Welding process on weld 099 located at PCMK SEG3019X. ZPMC QC Mr. Guo Xing Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair-1. Critical Weld repair report identified as B-CWR2614.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037705 performing the Flux Cored Arc Welding process on weld 010 located at PCMK SA3360. ZPMC QC Mr. Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067877 performing the Flux Cored Arc Welding process on weld 179 located at PCMK SEG3019BB. ZPMC QC Mr. Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 215553 performing the Shielded Metal Arc Welding process on weld 028 located at PCMK SEG3019AA. ZPMC QC Mr. Guo Xing Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair-1. Critical Weld repair report identified as B-CWR2755.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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# **Summary of Conversations:**

No significant conversations were reported on this date.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer